CLAIMS:

What is claimed is:

1. A method comprising:

optimizing asymmetric halftone dots;

encoding the asymmetric halftone dot into a symmetric resolution format; and

generating high resolution symmetric binaries using said encoded dots wherein resulting binaries will be decoded by a printer's imbedded binary resolution conversion algorithm.

2. The method according to claim 1 further comprising:
optimizing halftone asymmetric dots by complying with rotation insensitivity.

3. The method according to claim 1 further comprising:
optimizing halftone asymmetric dots to comply with a minimum dot size.

4. The method according to claim 3 further comprising:
optimizing halftone asymmetric dots to a smallest robust imageable dot cluster wherein dot clusters that are smaller than this size will either fail to develop, their appearance will vary dramatically from one dot to a next, or their appearance will vary as a function of environmental factors such as temperature and atmospheric pressure.

5. The method according to claim 1 further comprising:
optimizing halftone asymmetric dots to comply with a minimum hole size.

6. The method according to claim 5 further comprising:
optimizing halftone asymmetric dots to a smallest robust imageable hole cluster wherein hole clusters that are smaller than this size will either fail to develop, their appearance will vary dramatically from one hole to a next, or their appearance

will vary as a function of environmental factors such as temperature and atmospheric pressure.

7. The method according to claim 1 further comprising:

optimizing halftone asymmetric dots to comply with a minimum appendage requirement.

8. The method according to claim 7 further comprising:

optimizing halftone asymmetric dots to a smallest robust imageable appendage wherein appendages that are smaller than this size will either fail to develop, their appearance will vary dramatically from one dot to a next, or their appearance will vary as a function of environmental factors such as temperature and atmospheric pressure.

9. The method according to claim 1 further comprising:

optimizing halftone asymmetric dots to comply with a minimum cavity requirement.

10. The method according to claim 9 further comprising:

optimizing halftone asymmetric dots to a smallest robust imageable cavity wherein cavities that are smaller than this size will either fail to develop, their appearance will vary dramatically from one hole to a next, or their appearance will vary as a function of environmental factors such as temperature and atmospheric pressure.

11. A printer comprising:

a digital front end having symmetric halftone dots which are encoded versions of optimized asymmetric halftone dots for generating high resolution symmetric binaries using said encoded dots wherein resulting binaries will be decoded by a printers imbedded binary resolution conversion algorithm.

12. The printer according to claim 11 wherein the asymmetric halftone dots comply with rotation insensitivity.

13. The printer according to claim 11 wherein the asymmetric halftone dots comply with minimum dot size.

14. The printer according to claim 13 wherein the asymmetric halftone dots employs a smallest robust imageable dot cluster wherein dot clusters that are smaller than this size will either fail to develop, their appearance will vary dramatically from one dot to a next, or their appearance will vary as a function of environmental factors such as temperature and atmospheric pressure.

15. The printer according to claim 11 wherein the asymmetric halftone dots comply with a minimum hole size.

16. The printer according to claim 15 wherein the asymmetric halftone dots employs a smallest robust imageable hole cluster wherein hole clusters that are smaller than this size will either fail to develop, their appearance will vary dramatically from one dot to a next, or their appearance will vary as a function of environmental factors such as temperature and atmospheric pressure.

17. The printer according to claim 11 wherein the asymmetric halftone dots comply with a minimum appendage requirement.

18. The printer according to claim 15 wherein the asymmetric halftone dots employs a smallest robust imageable appendage wherein appendages that are smaller than this size will either fail to develop, their appearance will vary dramatically from one dot to a next, or their appearance will vary as a function of environmental factors such as temperature and atmospheric pressure.

19. The printer according to claim 11 wherein the asymmetric halftone dots comply with a minimum cavity requirement.

20. The printer according to claim 15 wherein the asymmetric halftone dots employs a smallest robust imageable cavity wherein cavities that are smaller than this size will either fail to develop, their appearance will vary dramatically from one dot to a next, or their appearance will vary as a function of environmental factors such as temperature and atmospheric pressure.

21. A method comprising:

optimizing asymmetric halftone dots for rotation insensitivity, minimum dot size, minimum hole size, minimum appendage, and minimum cavity;

encoding the asymmetric halftone dot into a symmetric resolution format;

generating high resolution symmetric binaries using said encoded dots wherein resulting binaries will be decoded by the printers imbedded binary resolution conversion algorithm satisfies the requirements of raster output scanner electronics.